1: Handy E-5 (1920-1921)1923 OX6 Marquesas OX6

hundred thousand. It is probable that it[A] fluctuated between these two extremes, being reduced considerably at times of severe drought and famine—Garcia (14, p. 125) cites an historical instance—and being recuperated gradually to its maximum during the intervening times of plenty.

Traditional Evidence of Settlement

No evidence was found among natives living today of any knowledge of immigration into the group by their ancestors, nor of occasional arrivals of small groups of individuals. The route by which the first settlers probably came, as indicated by traditions, is shown on the map (fig. 1), together with the contrary direction of the ocean currents and prevailing winds.

No direct evidence of any knowledge of the coming of their ancestors to the islands is to be found among the natives living today. According to Porter, however, there was a tradition of a god named Haii, who is said to have arrived at Ha'a Tuatua Bay on the east coast of Nuku Hiva, bringing chickens and pigs. The people did not know whether this person came in a ship or a canoe, nor could they tell how long he remained among them. The time of his arrival was said to have been more than twenty generations prior to Porter's visit. Estimating on the basis of twenty-five years to a generation, this reckoning would indicate that Haii, if he were a real, and not merely a legendary character, visited Nuku Hiva something over five hundred years prior to Porter's visit in 1813. The same writer was told also that the coconut was, according to legend, brought by a god named Tao, who came from an island named Utupu (Ootoopoo), which was supposed to lie somewhere to the windward of Fatu Hiva (La Magdalena) (24, pp. 91-2). [1]Porter was apparently not told how many generations ago this was supposed to have been. This is the only direct evidence I have that indicates any conception on the part of the natives of the arrival in their islands of immigrants or visitors from the outside world prior to European contact.

There is, however, indirect evidence, that proves the ancient Marquesas islanders to have had a knowledge of other islands and regions in Polynesia. The Nuku Hiva story in which Pepeiu's voyage is recounted indicates a knowledge of the existence and location of Rimatara, Tubuai,

[1] It is my belief that this story is due to mistranslation of a simple reply. If one pointed to a coconut tree, or a coconut, and asked a native whence it came, he would reply, *"U tupu no i ao,"* it grew (or grows) from below. Porter's island "Ootoopoo" may, therefore, merely mean "it grew"; and the god Tao may even be a mispelling of *i ao*.

A [i.e., the population. - Analyst]

1: Handy E-5 (1920-1921)1923 OX6 Marquesas OX6

The harvesting of breadfruit at the time of the main crops, of which there were four in each productive year—that is when there was rainfall—was a communal enterprise undertaken at different times in different parts of the group. When the chief saw that the breadfruit were ready for harvesting, he would summon his workers with a blast of his conch shell, or would send an executive *tuhuna* to get adequate assistance. The first, or

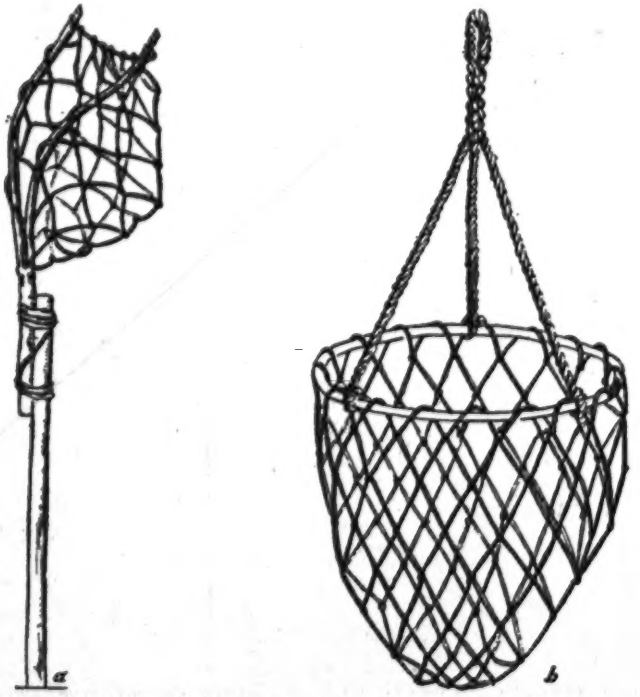

FIGURE 19.—Breadfruit nets: *a*, hand net for breadfruit (*paŋko*); *b*, large net for breadfruit (*ko'oka*).

preliminary crop of breadfruit, which always preceded by only a short interval the more abundant main crop, belonged entirely to the chief, and served to fill his private breadfruit paste (*ma*) pits from which his household, guests, assistants, and workers were fed, and the great tribal reserve pits back in the valleys, which were filled in good times as a provision against famines. The second harvest was used to fill the private family pits.

1: Handy E-5 (1920-1921)1923 OX6 Marquesas OX6

staple food. The importance of the breadfruit is indicated by an old custom recorded by Langsdorff (18, p. 135). He says: 241 262

> Every child from the moment of its birth inherits from its parents at least one bread-fruit tree, and this tree is tabooed even to the father and mother. If the parents are so poor that they have not a tree to settle upon the child, one is planted for it immediately: by this means a provision is made for the maintenance of the child, since one or two bread-fruit trees are sufficient to support a man the whole year round.

The natives say that when breadfruit grew in groves, undisturbed by the modern planting of coconuts, and of banana, mango, and other fruit-bearing trees, which seem to have a deteriorating effect upon them, there were more crops each year than at present. (See discussion of breadfruit seasons under Time Reckoning: Ehua and Mataiki.) In the Marquesas each season is divided into *mei nui* (large breadfruit) and *mei momo* (small breadfruit), for there is always on each fruit-bearing stem of these trees one *mei* that matures before the others, the *tou motua* (eldest child). These large *mei, mei nui,* are picked first, the rest of the season being given up to picking the small *mei, mei momo,* or *ki'ihi,* as fast as they mature.

One can trace native diet through the various seasons from the time of abundance, when all dishes with breadfruit as a foundation appeared, when *ma* (fermented breadfruit paste) was made with an eye to the inter-breadfruit season and to the possible famine time—which apparently came often, for the valleys were over-populated and irregularly watered; and one can follow the gradual change in diet as fresh breadfruit disappeared and *ma* became sourer and needed certain complements to make it palatable, and as, with the increasing scarcity of *ma,* other foundations became necessary; and, finally, one can see the shifts the natives were put to during famine times.

THE MAKING OF MA—STORED BREADFRUIT

Since the main business of harvest time is the making of *ma* (fermented breadfruit) that process should be described first. The horror of famine must have loomed large in the minds of Marquesans, for, in spite of their happy enjoyment of the present without a thought for the future in other respects, they developed in the making of *ma* a very elaborate system of conservation of the breadfruit in silos in the ground. 251 252 [731]

The breadfruit are picked mature, but not ripe, the ripening process being artificial. The stem is knocked off and a small sharpened guava stick (bamboo in Hiva Oa) is struck through at this point, so as to pierce the fruit from end to end. This hastens the ripening, which takes place usually in one day, sometimes in two. When the fruit is sufficiently tender,

1: Handy E-5 (1920-1921)1923 OX6 Marquesas OX6

practice in the rite, for the ceremonial priest ate the eyes of the victim as he was sacrificing him.

Some bodies taken to the temple at these times appear to have been eaten, though informants and manuscripts agree that the actual sacrifices were not eaten. At certain points during the chanting, according to Père Jean, the inspirational priest took out the eyes of the victim one at a time and ate them. He cut open the body and took out the heart, which he ate immediately. In the same way he devoured the breast, the bottoms of the feet, and insides of the hands. The body was then cooked, cut up, and divided among the participants in the rite (19).

When human sacrifices were to be offered to break a famine at Atu Ona, Hiva Oa, warriors were first dispatched to capture sacrifice victims—men, women, or children. When two or three had been seized, they were presented to the inspirational priest, adults being carried, alive or dead, slung naked on a pole like a pig. Children under three years of age were strangled, placed on the heads of old men, and carried to the inspirational priest. The drums would sound at the temple, the sign that all fire should be extinguished, and the chanting and beating of drums was continued during the sacrifice. The informant who gave this account said that when the fire was seen burning at the temple, all other fires could be lighted and cooking could be resumed. After the sacrifice rainfall and abundance were expected.

At Pua Ma'u human sacrifices were frequently made in order to bring rainfall and fertility to the land. The victims were offered to the tribal god, Tau'a-mata-uaua, who was supposed to cause things to grow. The natives say that after such a rite the whole country would be green. At Pua Ma'u I learned also that the dead bodies of victims were put in a special house for the purpose, being ranged along the wall in a sitting position or sometimes hung up to the ridge pole. When the bodies were decayed, the remains were thrown by the temple assistants into a stone hole in the platform of the temple.

Another description of the rite to break a famine comes from the manuscript of Père Pierre (4). On the occasion of this rite the human sacrifice was burned on the temple platform, after which the temple assistants (*taputoho*) braided baskets of coconut leaves, placing them upon their shoulders, went in procession upon the mountain ridges, reciting a chant called *vanana* or *uta va'ana*. This was supposed to bring about the growth of breadfruit. In another rite to bring rain, the body of a victim was also burned. This rite, called *vaititi*, consisted in suspending the body over a fire on the seashore, the arms and legs being tied to the four posts; held thus, the body was left to burn.

6: Lisiansky T-5 (1803-1806) 1814 OX6 Marquesas OX6

wood are embellished with a handsome red pea. The women tie up their long hair in knots, and, on ceremonious occasions, besmear themselves like the men. 1804. May.

The food of these islanders consists chiefly of fish, swine, cocoa-nuts, plantains, bananas, bread-fruit, tarro-root, and sugar-cane. The last is rather a scarce article; as also is pork, which seldom makes its appearance but on occasions of festivity. Both sexes eat their meals together, except when public dinners are given in the dining-rooms, where women dare not appear, for reasons which I have before assigned.

In case of a bad harvest the poor suffer dreadfully, as they never lay up a sufficient stock of provisions to prevent the horrors of famine. A few years ago, numbers of them were obliged to roam among the mountains in search of what they could find, leaving their wives and children at home dying with hunger. Roberts told me, that in the bay of Tayohaia only, four hundred perished on this occasion. In these times of dearth, every one was in danger, he said, of losing his life; not only for want of nourishment, but from the violence of one stronger than himself, who may seize and devour him.

Considering the mild temper of the inhabitants of this island, it is difficult to believe that they are cannibals. Roberts, however, assured me, that the bodies of the prisoners taken in war were eaten, all but the sculls, which were preserved for trophies. We purchased several of these sculls, paying a knife for each; but neither their wearing them as trophies, nor offering them for sale, proves cannibalism: like other savages, they may cut off

6: Lisianasky T-5 (1803-1806) 1814 OX6 Marquesas OX6

Carpé. This root is about three feet long. The greater part of it grows out of the ground. It takes twelve months to ripen, and is made into puddings, or prepared like yams. 1804. May. 137 [252]

Hoé. A kind of wild potatoe, which has a bitter taste, and affords but little nourishment. It is only used by the islanders in times of famine. [731]

Titou. A root that grows wild in the fields, and resembles our turnip.

Togoogoo. A root of the size of a cocoa-nut without its husk: when boiled, it turns to a sort of pudding. [252]

There is only one species of salad herb on the island, that is calculated for the table. It is called *emahé*, and considerably resembles our field-mustard.

Knowing from experience how necessary the language of a country is to a person who travels in it, especially where no assistance can be obtained, except what some lucky chance may present, as, for instance, our interpreter Roberts; I endeavoured to collect as many words and sentences of the language of this island as possible, which I shall give in the Appendix, in the hope of their being useful to future navigators. ooo

During our stay at Tayohaia, I could make no observations on shore: however, having taken a great many lunar distances the day before our arrival at the island of Noocahiva, we were enabled to lay down with great precision the island of Motané. 131

8: Handy T-5 (1920-1921)1922 OX6 Marquesas OX6

clusion that the fact reported must have been "quite exceptional" we must agree. It was customary, however, during famine times, for people to seek the service of chiefs in order to be fed, and it may have been the whim of some chief to have a particular mark tattooed upon them, but this was certainly not a general custom. Indeed, Melville relates the "Hanamanoo" episode as an especial and unusual case; and it does not seem unlikely that the same story is at the basis of both his and the Russians' accounts. They have probably misinterpreted the ordinary custom of the father of the *opou* during the period of tattooing feeding the *ka'ioi*, who were no more closely organized as a society than is our own "younger set," to whom they were somewhat analogous. This would fit, too, with the custom of the *tuhuna*'s giving them samples of their art gratis during the rest periods of the *opou*.

A careful search for any possible significance of face designs as tribal marks, corroborative of Porter's statement to this effect (14, p. 114), calls forth today, except in one instance only, vociferous refutation. However, that face patterns were insular during a later period of the art is certain, the oblique *paheke* belonging to Nuku Hiva, the horizontal bands called *ti'ati'apu* being worn by Hiva Oans, and the latter's variant, the *ihuepo*, whose central band covers the nostrils themselves, being prevalent on Fatu Hiva. Lacassagne (9, p. 79) quotes Lombroso as declaring that face tattooing on Nuku Hiva distinguished two enemy factions, the one being marked by a triangle, the other by a circle. Triangles are associated with the tattooing of the inhabitants of Tai-pi Valley by Melville and Berchon, and these Tai-pi were powerful enemies of the tribes of Tai o Hae Valley. More than one present-day informant has stated that men of a certain tribe living in Tai o Hae were marked with a great black circle on the face (Pl. v, 10). Seeing the two styles and finding them associated with two enemy factions, it might be natural to conclude that face decoration was to distinguish enemies; but this is the one instance in which a tribal significance is assigned today to a face design.

That the operation of tattooing was performed during propitious seasons or at times of importance in the life of the individual to be decorated has been reported by Desgraz (18, p. 223). Living Marquesas informants place its practice during the dry season when there was no breadfruit to be harvested, during the months of October, November, December and early January. The women, whose tattooing may still be examined, place the beginning of their work at from seven to twelve years of age; the

Melville made up his story of the "Hanamanoo" episode after having read Langsdorff or Krusenstern.

10: Linton E-5 (1920-1921)1939
OX6 Marquesas OX6

168 child in the group. On Tahuata, the island next to the one on which I was living, there were over two hundred deaths for every birth.

Environment and Economy

133 The Marquesas are a series of high islands, very rugged and
775 mountainous. At the Western end of Hiva Oa, a cliff, straight as the wall of a house, rises from the sea to a height of 2,000 feet. The natives believe this to be the place from which the spirits of the dead leap off to the bottom of the sea, whence they travel eastward to Hawaiki, the mythical land from which
[793] all Polynesians came. At the top of this cliff lived a single priest whose duty it was to watch this leap and presumably say farewell to the ghost as he passed on to the next world. The priest
[211] kept records of each death and birth by means of a long cord, tying a knot for each birth and untying a knot for each death, thus keeping a sort of informal census for the group.

133 The islands have no coastal shelf; the coast goes down with no barrier reef, making fishing difficult and dangerous. The interior of the islands is extremely rugged, consisting chiefly of sections of blown-up volcanic craters with peaks four to five thousand feet high. Many of the larger islands have never been traversed even today. The coast is made up of narrow valleys cut off from one another by ridges so high and steep that in many cases one can get from one valley to another only by sea.
137 There is considerable timber in the valleys and also on the slopes at the eastern ends of the islands. The uplands are covered by a growth of low ferns, across which one can see for many miles. There are a few ironwood trees, but most of the high country is open and waterless.

132 Since the islands are only ten degrees south of the equator,
731 the climate is warm, with little seasonal change. Being north of the trade winds and consequently devoid of seasonal rains, the islands are subjected from time to time to long and destructive droughts, which lead to serious crop failures and even to shortage of drinking water, as the streams go dry. This state

10: Linton E-5 (1920-1921)1939
OX6 Marquesas OX6

of affairs has had considerable effect on the life of the people. In good seasons there was plenty of food; but one of these droughts, which might last as long as three years, used up all the stores of food and caused genuine starvation; sometimes it drove the natives to hunger cannibalism. A severe drought of this sort could cut the population by a third.

Agriculture was practiced under difficulties because of the steep slopes, very little of the land being level enough for irrigation by the crude native methods. The staple crops in other Polynesian countries, the taro and the yam, were of very little importance here. The Marquesans were dependent almost entirely upon the tree crops—breadfruit, cocoanuts, bananas—and on sugarcane. Another important crop was the paper mulberry, a domesticated tree with very long slender stems from which the natives made their clothing. These tree crops required no intensive cultivation. When a child was born, the father planted a breadfruit tree and a cocoanut tree for the new addition to the family. These trees would provide the child with food as long as he lived. All trees and gardens were individually owned and inherited. A certain right of eminent domain was invested in the chief, but he was hesitant to take a garden from even the lowliest native for fear of retaliation through magic.

In good years there were four breadfruit crops, the first of which was gathered communally. When the fruit was ready for gathering, the chief sent out messengers announcing the event; everyone turned out to gather the crop, which was cut up, fermented, and stored in great communal pits hidden outside the village so that they would not be discovered in case of an enemy raid. The pits were enormous; I have seen some as much as twenty feet across and twenty feet deep, cut into rocky soil. The pit was lined with leaves, and the breadfruit paste was wrapped in packages which preserved it so well that it never became too old for consumption. The entire yield of the first crop went into these large pits, which were opened only in time of famine. The second crop was similarly preserved, but was stored in the household pits. There were no rules governing

10: Linton E-5 (1920-1921)1939
OX6 Marquesas OX6

226 captive. Surplus fish were either sun-dried or salted. The Mar- [263] quesans, unlike the other Polynesians, attached a tremendous value to salt and combed the rocks around the cliffs for it.

272 Mention should be made also of kava, a narcotic drink made 276 from a root, which was chewed up, usually by the boys and girls, as they had better teeth than their elders, spat into a bowl, and fermented. Its effects were mild. The drinker became extremely sensitive to sounds or disturbances, and desired to be let alone. Kava parties were not convivial affairs; the participants after two or three cups of kava each, settled back comfortably and talked very little. Since there was very little land on which the kava root could be raised, the drink was a luxury and reserved for the household heads.

266 The last item in connection with food is cannibalism. In the old days the Marquesans were vigorous cannibals, and from my talks with the old men who had indulged in the practice, I am convinced that, while there was ceremonial cannibalism, there was also eating of human flesh because they found it good. This is one of the few regions where women were permitted to eat human meat. Although there was eating of enemies because of revenge obligations, there was also plain meat-hunting of enemy tribes for food, especially at times of food shortage. Another indication that cannibalism was not merely ceremonial is that these people ate everyone from infants up. The purpose of ceremonial cannibalism is to absorb the good qualities of the individual one is consuming, but the Marquesans had a preference for children too young to have attained admirable qualities. There were also stories of man-eaters, people who developed a pathological fondness for human flesh. Such a man would kidnap children of his own tribe or even kill and eat his own wife or children. There was ordinarily no cannibalism within the tribe, although in times of extreme famine an inspirational priest might designate certain victims who would be killed and eaten. Sacrifices to the gods were not eaten, the idea being that the entire individual was left to be consumed by the gods. Revenge victims, however, were always eaten.

[731]

[782]

/80 cont./
entire archipelago census. An example of such /81/ extrapolations is shown in the compilation of Fr. Simeon Delanas, a French missionary in the Marquesas who wrote extensively on Marquesan culture and natural history: 161 174

Year	Source	Population
1595	Mendana	55,000
1791	Marchand	32,000
1804	Krusenstern	70,000
1813	Porter	230,400
1838	D'urville	25,000
1843	du Petit Thouars	20,200

To the other extreme are the extremely conservative estimates of the population such as that made by Linton (1938, p. 150) in which he stated that tribes rarely consisted of more than 1000 people.

On the basis of extended archeological studies, historic documents and legendary evidence discussed at length elsewhere (Suggs 1960, Suggs 1961), it appears that the peak population of the archipelago was between 100,000 and 125,000 and was reached in the latter half of the eighteenth century.

After the beginning of continual European contact about 1790, and especially following the French occupation of 1840, the population dwindled rapidly due to the introduction of children's communicable diseases, social diseases and tuberculosis. Firearms aided and added to the anarchy resulting from the collapse of the native political system. /82/ Furthermore, there is evidence of a very severe, prolonged famine in the early nineteenth century that may have wiped out as much as one-third of the population. 175 [161] [165] [131]

Soon after French contact, some attempts at census-taking were made and provide us with certain data illustrating the rapid decline of the population up to the turn of the century. 161 175

Source	Date	Total Population
Jouan	1856	12,550
des Vergnes	1872	6,045

/112 cont./

120 years elapsed since the French colonization of these islands. Attempts have also been made to identify the causative forces that have produced the changes noted in sexual behavior. Naturally, these forces have acted on the society as a whole and often the effects upon the sexual behavior are not direct but mediated through other agencies. To discuss them /113/ in relation to sexual behavior alone is perhaps to bias or slant the picture, but the over-all acculturation processes going on in the Marquesas are far beyond the scope of this paper; therefore, statements of interrelationship between sexual and other social and economic phenomena have been generally restricted to areas of major importance.

In general, the acculturation changes in Marquesan sexual behavior have occurred in areas that are completely expectable in view of the nature and history of Marquesan-European culture contact. As I have discussed elsewhere, the protracted period of frequent whaler visits to the island between 1790 and 1840 set the stage for culture collapse by placing considerable strain on the whole fabric of native society. The economy was severely taxed by the necessity of provisioning European ships that stopped in large numbers in the major bays of the main islands, carrying away with them very sizable quantities of food. Furthermore, famine of very serious proportions occurred between 1803 and 1813. Internecine warfare increased as a result of firearms, traded for provisions by whalers, while the introduction of white diseases helped to increase the death rate, already swelled by war. Thus, when the French moved in in 1840, the native society was by no means a healthy specimen: considerable disorganization was evident in both social and economic spheres.

The French occupation was preceded by a period during which French missionaries smoothed the way and obtained vital information on the culture, which was subsequently used to hasten its destruction. When the military /114/ expedition arrived, the French immediately set about systematically destroying the social structure, first by subduing and/or replacing chiefs, thus gradually eliminating all capable leadership. The substituted "chiefs" were often not acceptable